Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Previously Presented) A method for making a device for echographic exploration of tissues or organs of a human or animal body, comprising:

providing an ultrasound transducer having a nominal excitation frequency greater than 20 MHz and a focal length of about 20 mm to about 25 mm, said transducer adapted for deep penetration echographic exploration of tissues or organs of the human or animal body.

2. (Previously Presented) A method for exploring tissues or organs of a human or animal body, comprising:

exploring the tissues or organs of a human or animal body with an ultrasound transducer having a nominal excitation frequency greater than 20 MHz and a focal length of about 20 mm to about 25 mm, to achieve deep penetration echographic exploration.

3. (Previously Presented) A method according to claim 2, further comprising the step of moving the ultrasound transducer over a pars plana to avoid an ultrasound beam being absorbed by a lens of the eye.

4. (Previously Presented) A method according to claim 2, further comprising the step of covering the ultrasound transducer with a membrane of plastic material.

5. (Previously Presented) A device for deep penetration echographic exploration of tissues or organs of the human or animal body, the device comprising:

a transceiver system operating in the range 20 MHz to 200 MHz; and

an ultrasound transducer coupled to the transceiver system, said transducer having a focal length of about 20 mm to about 25 mm.

6. (Previously Presented) A device according to claim 5, wherein the ultrasound transducer comprises a probe, and the device further comprises a motor to move the probe in a vicinity of an anterior wall of an eye.

7. (Previously Presented) A device according to claim 6, wherein the motor displaces the ultrasound transducer along two orthogonal axes.

8. (Currently Amended) A device according to claim 6, wherein the motor moves the transducer in an arcuate ~~accurate~~ displacement.

9. (Previously Presented) A device according to claim 7, wherein the ultrasound transducer is focused along a third axis orthogonal to the two orthogonal displacement axes.

10. (Previously Presented) A device according to claim 5, wherein the device further comprises an electronic focusing system to focus, without moving, the ultrasound transducer.

11. (Previously Presented) A device according to claim 5, further comprising a plastic membrane covering the ultrasound transducer.

12. (Previously Presented) A method according to claim 1, wherein the focal length of the ultrasound transducer is approximately 25 mm.

13. (Previously Presented) A method according to claim 1, wherein the tissues or organs explored comprise eyeballs.

14. (Previously Presented) A method as claimed in claim 13, wherein the tissues or organs explored comprise a posterior segment of the eyeball.

15. (Previously Presented) A method as claimed in claim 14, wherein the tissues or organs explored comprise a macular region of the posterior segment of the eyeball.

16. (Previously Presented) A method as claimed in claim 1, wherein the tissues or organs explored comprise at least one of oculomotor muscles, eye socket fat, and an optic nerve.

17. (Previously Presented) A method according to claim 2, wherein the nominal excitation frequency is between 50 MHz and 80 MHz.

18. (Previously Presented) A method according to claim 2, wherein the focal length is approximately 25 mm.

19. (Previously Presented) A method according to claim 2, wherein the tissues or organs explored comprise eyeballs.

20. (Previously Presented) A method according to claim 19, wherein the tissues or organs explored comprise a posterior segment of the eyeball.

21. (Previously Presented) A method according to claim 20, wherein the tissues or organs explored comprise a macular region of the posterior segment of the eyeball.

22. (Previously Presented) A method according to claim 2, wherein the tissues or organs explored comprise at least one of oculomotor muscles, eye socket fat, and an optic nerve.

23. (Previously Presented) A method according to claim 2, wherein the ultrasound transducer comprises a probe, and the method further comprises the step of moving the probe in a vicinity of an anterior wall of an eye.

24. (Previously Presented) A method according to claim 23, wherein the moving step moves the probe along two orthogonal axes.

25. (Previously Presented) A method according to claim 24, further comprising the step of focusing the ultrasound transducer along a third axis orthogonal to the two orthogonal axes.

26. (Currently Amended) A method according to claim 23, wherein the moving step moves the probe in an arcuate ~~accurate~~ displacement.

27. (Previously Presented) A method according to claim 2, further comprising the step of focusing the ultrasound transducer with an electronic focusing system.

28. (Previously Presented) A device as claimed in claim 5, wherein the focal length of the ultrasound transducer is approximately 25 mm.

29. (Previously Presented) A device as claimed in claim 5, further comprising:
a system to amplify and store a radio frequency signal as back-scattered after exploration; and
a system to record an amplified signal.

30. (Previously Presented) A device as claimed in claim 5, further comprising:
a system to amplify and store a radio frequency signal as back-scattered after exploration; and
a system to process an amplified signal in a form of an image.

31. (Previously Presented) A device as claimed in claim 5, further comprising:
a system to amplify and store a radio frequency signal as back-scattered after exploration; and
a system to process an amplified signal in order to perform tissue characterization.

32. (Currently Amended) A method for making the device of claim 5, ~~a device for echographic exploration of tissues or organs of a human or animal body,~~ comprising:

providing an ultrasound transducer having a nominal excitation frequency greater than 20 MHz and a focal length that is capable of focusing on the macular region of the eye said transducer adapted for deep penetration echographic exploration of tissues or organs of the human or animal body.

33. (Currently Amended) A device for deep penetration echographic exploration of tissues or organs of the human or animal body, the device comprising:

a transceiver system operating in the range 20 MHz to 200 MHz; and

an ultrasound transducer coupled to the transceiver system, said transducer having a focal length of about 20 mm to about 25 mm and capable of focusing on the macular region of the eye.

34. (Currently Amended) A method for making a device for echographic exploration of tissues or organs of a human or animal body, comprising:

providing an ultrasound transducer having a nominal excitation frequency greater than 20 MHz and a focal length of about 20 mm to about 25 mm that is capable of focusing on the posterior wall of the eye, said transducer adapted for deep penetration echographic exploration of tissues or organs of the human or animal body.

35. (Currently Amended) A device for deep penetration echographic exploration of tissues or organs of a human or animal body, the device comprising:

a transceiver system operating in the range 20 MHz to 200 MHz; and

an ultrasound transducer coupled to the transceiver system, said transducer having a focal length capable of focusing on the posterior wall of the eye and of about 20 mm to about 25 mm.